

REMARKS

Claim Objections

The objection to Claim 3 has been corrected by amendment above. No new matter has been added. Entry is requested.

35 U.S.C. § 103

Claims 1, 4, 6-9, 11-15 and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Juzswik et al (US 6,612,165 B2) in view of Hardman et al. (US2002/0126005 A1) and Harm et al (US 2004/0084517 A1). This rejection was fully addressed in the response filed to the first office action, reproduced below.

The subject invention, as claimed, is directed to a method for integrating tire identification and vehicular identification data pursuant to a specific sequence of steps. The invention method provides for effective and efficient data management and integration between a tire data retention system (utilizing tire tag means) and a vehicle data retention system (independent claims 1, 9, 13, and claims dependent therefrom). The data so integrated may be uploaded to an archive database (claims 2, 9, 13); the steps to the method may be efficiently divided between a tire tag supplier, a tire supplier, and a vehicle manufacturer (claims 3, 9); calibrating tag functions (claims 4, 9); and integrating tire identification data with vehicle identification data in a common database and vice versa (claims 5, 8, 10, 12). The invention method according to a further aspect schedules data management between a tire based data system and a vehicle based data system with a vehicle ECU contemporaneously with the running of a diagnostic test on the vehicle at the conclusion of manufacture.

The Examiner has simply failed to provide a reference or multiple references that teach or suggest the claimed methodology. Nevertheless, solely through improper hindsight, the Examiner has drawn an improper and unsupported conclusion that the subject invention would be obvious to one skilled in the art. The end result of the invention method is a planned sequential and efficient integration of data between a tire database and a vehicle data base. No reference even addresses this objective, much less accomplishes the intended result.

Juzswik teaches a tire pressure monitoring system that is *operationally* (emphasis added) linked to a vehicle base unit. Tire pressure data generated during operation of the vehicle is transmitted to the vehicle unit and compared with a range of permissible pressures.

Such a system is not related to an integration between a tire database, including tag and tire identification, and a vehicle database and/or ECU during vehicle assembly. The claimed method is not directed to the sharing of measurement data between a tire based pressure monitoring system and a vehicle based controller during the operation of the vehicle. Rather, the claimed method is directed to a coordinated sequence of manufacturing a tag having tag memory, writing tag identification data into the tag memory, affixing the tag to a tire; writing tire identification data into the tag memory; assembling the tire to a vehicle; and then reading the tire and tag identification data into the vehicle database.

The Examiner points to Juzswik as teaching the step of writing tag means identification data into the tag memory and, in particular, column 3, lines 42-47 thereof as teaching writing tag means identification data into tag memory. However, there is no teaching to write tire identification data identifying the tire into the tag memory. Moreover, there is no teaching as to when in the sequence of tire tag, tire, and vehicle assembly the writing of tag identification into tag memory occurs in Juzswik. The Examiner has pointed to an end result in Juzswik as a basis for rejection the subject method that incorporates a sequence of steps in a preferred and advantageous order. Such a basis for rejection is not appropriate and extends the meaning of the reference well beyond its literal and implied boundaries.

Likewise, the Examiner points to column 3, lines 1-column 4, line 18, and column 5 lines 15-27, as teaching validation of tag identification data throughout the life cycle of the vehicle. However, again, the disclosure does not contain any reference as to when or by what party the tag identification data is stored (see claims 1, 9, 13 and their dependencies). Nor does the reference teach the inclusion of vehicle identification data in the tag memory (claims 3, 8). Nor does the reference teach a coordinated exchange of data at the endpoint in the vehicle assembly at which a diagnostic of the vehicle systems is conducted. The Examiner has not, in short, made any showing from Juzswik as to the claimed coordinated sequence of steps. It is noted that the Examiner has conceded that Juzswik does not teach calibrating tag functions; including calibration data into the tag means identification data; writing a vehicle identification code identifying the specific vehicle into the tag memory. Applicant further contends that Juzswik does not teach uploading tire identification data from the vehicle data retention memory to an archive database (claims 2, 9, 13 and their dependencies); a division by party as to the steps performed in claim 1(claim 3); writing an OEM part number into the tag memory prior to transferring the tire to an OEM (claims 8 and 10); validation of tire

identification data in the vehicle electronic control unit against tire identification data of tires used by the vehicle throughout the lifecycle of the vehicle (claim 11); reading the tire identification data from the tire data storage means into the ECU database contemporaneously with the running of a diagnostic test at the conclusion of vehicle assembly (claim 17).

The addition of Hardman does nothing to ameliorate the deficiencies of Juzswik discussed above. Hardman in paragraph 120, as the Examiner notes, speaks to a reader 30 that may request information from memory locations of a tire tag 70. Nowhere, however, in Hardman, is there any teaching as to when such information is stored within the tag memory relative to vehicle and tire manufacture and assembly, or when the communication of such information is made relative to a vehicle data retention memory as required by the claimed invention. The sequence of the claimed methodology is intended to comprise an efficient and productive means by which tag, tire, and vehicle information are gathered, stored, and communicated between the tire, the vehicle, and an archive database. The sequencing of such steps and the coordination of such communication at a stage when the vehicle diagnostic is run is not found or suggested in Hardman. Hardman, therefore, fails in the same manner as Juzswik in achieving a methodology incorporating the benefits of the claimed invention. It is further noted, as the Examiner concedes, that Hardman in conjunction with Juzswik fails to teach writing tire identification identifying data from the tag memory into a vehicle database; connecting the tire database to the vehicle electronic control unit by means of a vehicle data bus. Applicant submits further that there is no teaching or suggestion in either reference that would direct one skilled in the art as to the desirability or feasibility of incorporating such capability. Nor is there any teaching in either reference demonstrating an appreciation of their respective deficiencies in the aforementioned areas.

The addition of Harm to the references above does not cure the deficiencies in the prior references for at least the reasons set forth above and for the following reasons. The claimed invention as specified and claimed recites a sequence of steps that none of the references, including Harm, teach or suggest. Harm does not teach a sequence in which a tag is manufactured and identification data is then written into the tag memory; subsequently the tag is affixed to a tire and tire related information is then written into tag memory; and then the tire is associated with a specific vehicle and the tire identification memory is then written into the vehicle data base from the tag memory. Nowhere is such a method disclosed in any of the cited art. Harm fails to teach the coordination of information storage into a tag memory vis-a-vis a tag manufacturer and a tire manufacturer, and a subsequent integration of vehicle

information into the tag and an upload of relevant information at the running of system diagnostics at the conclusion of vehicle manufacture. The Examiner has pointed to no such teaching in any of the references to instruct one skilled in the art as to such a sequence.

Applicant further submits by way of an affidavit under 37 C.F.R. 131 showing the invention was made by Applicant prior to the effective date of the Harm reference. As such, Harm is further not applicable as prior art in the combination proposed. Consideration of the submitted affidavit and removal of the Harm reference against the allowance of the pending claims are requested.

As Juzswik in view of Hardman and Harm fails to establish *prima facie* obviousness of the invention as recited in claims 1-18, it is respectfully requested that the rejection be withdrawn.

Applicant reiterates that the claims set forth a method of particular steps performed in a recited sequence. The art does not individually or collectively teach or suggest the combination of steps performed in the recited sequence and can, therefore, not provide a valid basis on which to conclude the claims are obvious. While one of ordinary skill in the art could try modifying the methodology taught in the references to meet the claim language, such is not the proper standard for obviousness absent a teaching or suggestion to do so. In the subject combination of references, the Examiner has pointed to no teaching or suggestion from the references themselves that would instruct one of skill in the art to make the selective combination of step and sequence modifications necessary to meet all the recitations in pending claims 1, 4, 6-9, 11-15 and 18.

Claims 2, 3, 5, 16 and 17 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Juzswik et al as modified by Hardman et al and Harm et al in view of the admitted prior art. This rejection is respectfully traversed for the reasons set forth previously and reproduced below.

This rejection is respectfully traversed at least for the reasons set forth above regarding the combination of Juzswik, Hardman, and Harm, and for the following reasons.

As discussed above, the Harm reference is not prior art to the subject invention as evidenced through the submitted affidavit. In addition, the Examiner is in error that the disclosure set forth in the pending specification in combination with Juzswik, Hardman, and Harm can be deemed to render the invention obvious. Nowhere in paragraph 6 of the specification does Applicant admit that it is the state of the art to upload tag identification,

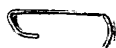
tire identification, and vehicle identification pursuant to claims 1-18 at the end stage in vehicle manufacturer when a diagnostic test is run. Certainly, a diagnostic test is run on vehicles systems such as engine controls, ECU protocols, etc. Applicant does not dispute that a diagnostic system test is conducted on new vehicles prior to completion of their manufacture. However, Applicant certainly does maintain, and the specification makes clear, that the diagnostic stage of a car's manufacturer has not been used as the stage for uploading tire, tag, and correlated vehicle identification information incorporated into the tag database pursuant to the claimed sequence of steps. The Examiner has pointed to no prior art mentioning in any respect, either explicitly or by suggestion, a coordinated integration of tire and tag information into a tag database and a subsequent integration of data from the tag database timed to contemporaneously occur at the running of final diagnostics on a newly manufactured vehicle. The invention, therefore, cannot be considered obvious in view of the complete silence and lack of teaching in every reference as to the claimed method of integration.

Re the rejection of claim 5, rewriting a vehicle identification code from the vehicle from Juzswik does not eliminate the deficiency in Juzswik in teaching the sequence of steps of claim 5 in combination with the steps of claim 1 wherein the *vehicle identification code is rewritten* (emphasis added) from the vehicle code from the vehicle. Nowhere does Juzswik speak to rewriting a vehicle identification code.

Again, one of ordinary skill in the art could try modifying the methodology taught in the references to meet the claim language, such is not the proper standard for obviousness absent a teaching or suggestion to do so. In the subject combination of references, the Examiner has pointed to no teaching or suggestion from the references themselves that would instruct one of skill in the art to make the selective combination of step and sequence modifications necessary to meet all the recitations, including step and sequence limitations, in pending claims 2, 3, 5, 16 and 17.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Juzswik et al as modified by Hardman et al and Harm et al in view of Meadows (US 6,149,060). This rejection is respectfully traversed for the reasons set forth previously, reproduced below.

This rejection is traversed for at least the reasons set forth above regarding the primary combination, the unavailability of Harm as prior art, and for the following additional reasons. Meadows relates to a method of identifying a tire through the use of siping, creating a bar

code. As such, it is totally unrelated to incorporating part information into a tire tag with tag and tire identification information, including the information set forth in claim 9. Meadows, as such, is not a relevant basis for concluding the subject invention as obvious. Moreover, the paragraph relied upon by the Examiner, namely column 3, lines 16-17, is directed to a bar code that incorporates the tire manufacturer's part number into the rubber product, not the OEM part number into a tag memory prior to transferring the tire to an OEM as required by claim 10. Nowhere does Meadows teach the incorporation of an OEM part number into a tire tag whereby, when the data is uploaded into a vehicle ECU and therefrom into an OEM database may be correlated and verified. The utility and efficiency of the invention as claimed in claim 10 allows the OEM to ensure that the tire placed on the vehicle is the intended tire *pursuant to the OEM's part number* (emphasis added). Not only is a valuable benefit obtained at that stage, but the OEM part number can be read from the tag throughout the life of the tire and a replacement tire can be so identified. Meadows is insufficient in teaching or suggesting the claimed method and does not afford the benefits so attained by the claimed invention. 

Applicant again points out that while one of ordinary skill in the art could try modifying the methodology taught in the references to meet the claim language of claim 10, such is not the proper standard for obviousness absent a teaching or suggestion to do so. In the subject combination of references, the Examiner has pointed to no teaching or suggestion from the references themselves that would instruct one of skill in the art to make the selective combination of step and sequence modifications necessary to meet all the recitations, including step and sequence limitations, in pending claim 10.

Regarding specifically the Examiner's response to the previously submitted arguments of Applicant, Applicant submits that the previously submitted arguments have been mischaracterized. Applicant's arguments point out that none of the references follow the same steps in the same sequence as set forth in the pending claims. Only by a modification of the steps and sequence in each of the references could the claimed invention be achieved. The Examiner contends such modifications and re-organization to the steps and sequence in the art would be obvious without providing any teaching or suggestion from the references themselves. Applicant has additionally noted that it can hardly be obvious to modify the methodology steps and sequences in the prior art when such a modification would run counter to the specific teachings in each reference. The Examiner has shown no instruction to one

skilled in the art on selectively modifying and combining the cited references that would, without the improper aid of hindsight, result in the claimed invention.

In regard to the Examiner's comments that claim 1 does not require the uploading of information from the vehicle at the running of system diagnostics at the conclusion of vehicle manufacture, Applicant disagrees. Claim 1 specifically recites a reading of tire identification data from the tag memory into a vehicle data retention memory (emphasis added) as the last step in the sequence. Clearly the vehicle has been manufactured when the step is performed as the term "vehicle" in such a limitation connotes. The sequence of steps concludes with uploading of information from a tag memory that is in a tire that has been previously associated with a specific vehicle (step e). The Examiner's contention that uploading information from a vehicle may be conducted prior to the conclusion of vehicle manufacture runs counter to the language of the claims as interpreted in light of the specification.

Regarding the statements in the Background of the Invention relied upon by the Examiner, Applicant maintains that the statements are mis-characterized and mis-applied in the subject rejection. No prior art cited by the Examiner teaches the claimed method and sequence, including Harm. Applicant has in the Background pointed that other types of vehicle information, not tire related data, is uploaded at the end of a vehicle's manufacture. In short, prior practice in the industry in not uploading tire information concurrent with other vehicle information is strong evidence of the non-obvious character of the claimed invention. Harm does not teach such a sequence of steps. Absent some teaching or suggestion in the prior art, the conclusion of obviousness is considered solely dependent on hindsight using the invention as a blueprint. There is further no suggestion on a division of tire information actions as recited in the claims. The gaps in the prior art teachings, and lack of suggestion as to the claimed method and sequence cannot be waived by a statement that such gaps are filled by knowledge generally available to those of skill in the art. The Examiner has accumulated art reflective of knowledge available to those skilled in the art and none of the art suggests or teaches modifications necessary to meet the limitations of the claims.

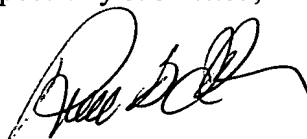
Regarding the Examiner's refusal to admit Applicant's affidavit as evidence of reduction to practice in reference to Harm, Applicant traverses the refusal. The Affidavit clearly predates Harm and encompasses documentary evidence that the sequence of steps embodied in the claims predates Harm. The nature of the invention is a procedural method and sequence of steps. Given the nature of the invention, the character and reasonableness of the evidence provided in the affidavit coupled with the comparatively short time between the

date of October 9, 2001 and the October 22, 2003 is evidence of diligent reduction to practice.

As to the bar code of Meadows , as discussed previously, application of siping in a tire to designate a product number is totally unrelated to tag data storage and the sequence for introducing the data into tag memory. The Meadows reference teaches applying a product identification contemporaneous with the tire manufacture and therefore would not be instructive at all to one skilled in the art toward achieving the claimed method. Meadows, in fact teaches, away from incorporating tire information into a tire after the tire is manufactured. Applicant reiterates that no teaching or suggestion has been identified in any of the references that would instruct one skilled in the art to the claimed method. The method claimed in claims 1-18 is specific as to the steps to be followed and their sequence. While isolated use of tags within a tire has been pursued, that is not what is being claimed. The art cited individually and collectively fails to set forth the series of steps in the recited sequence of the pending claims.

In light of this amendment, all of the claims now pending in the subject patent application are allowable. Thus, the Examiner is respectfully requested to allow all pending claims.

Respectfully submitted,



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